

FIG. 1

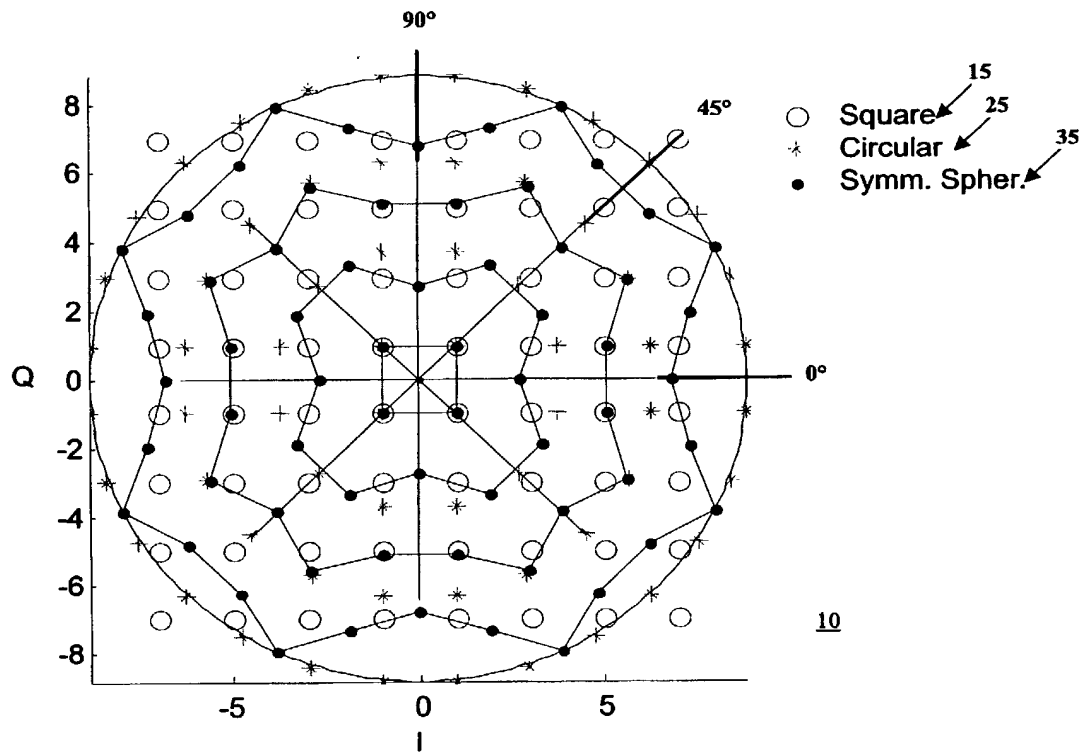


FIG. 2

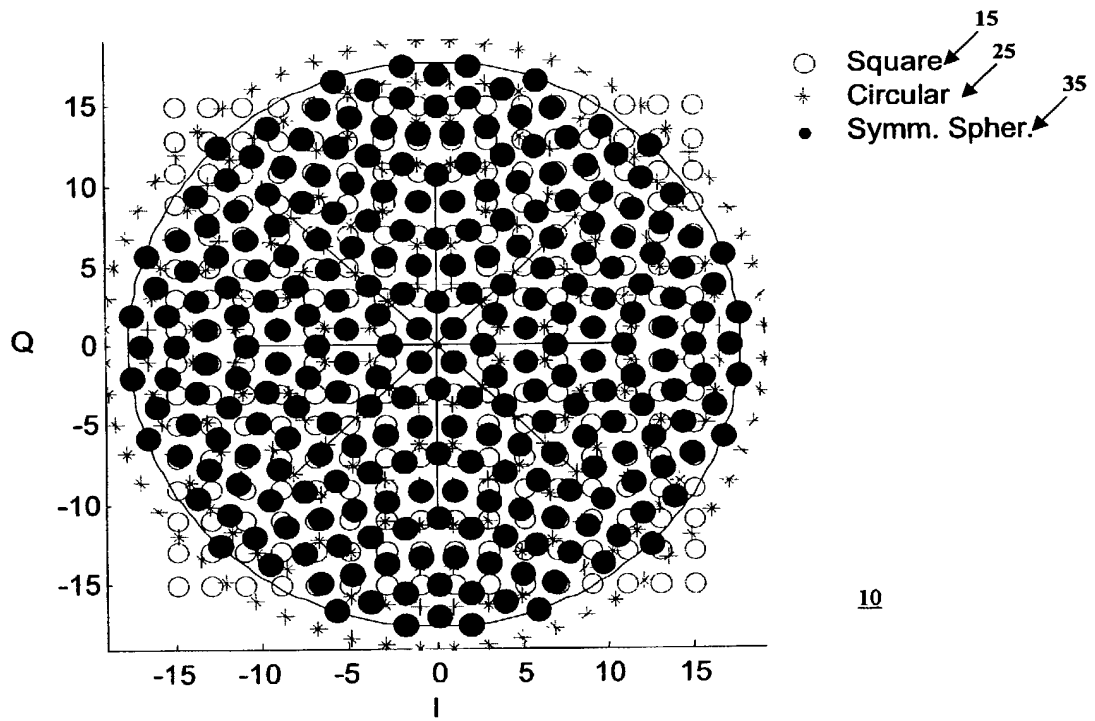


FIG. 3

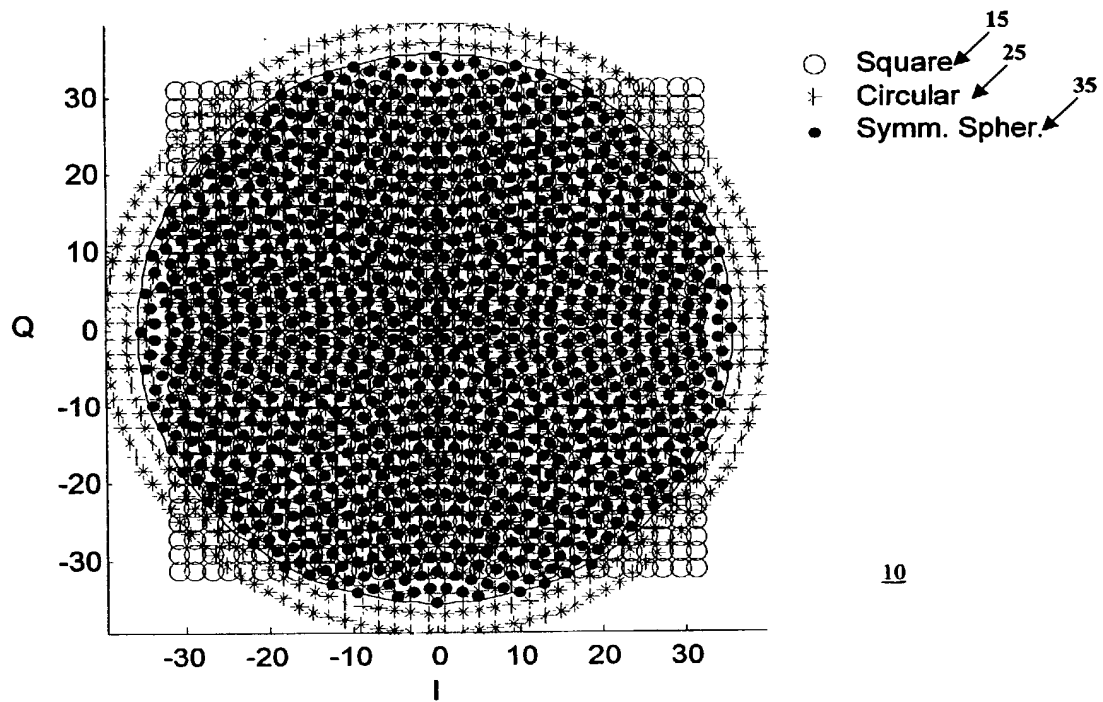


FIG. 4

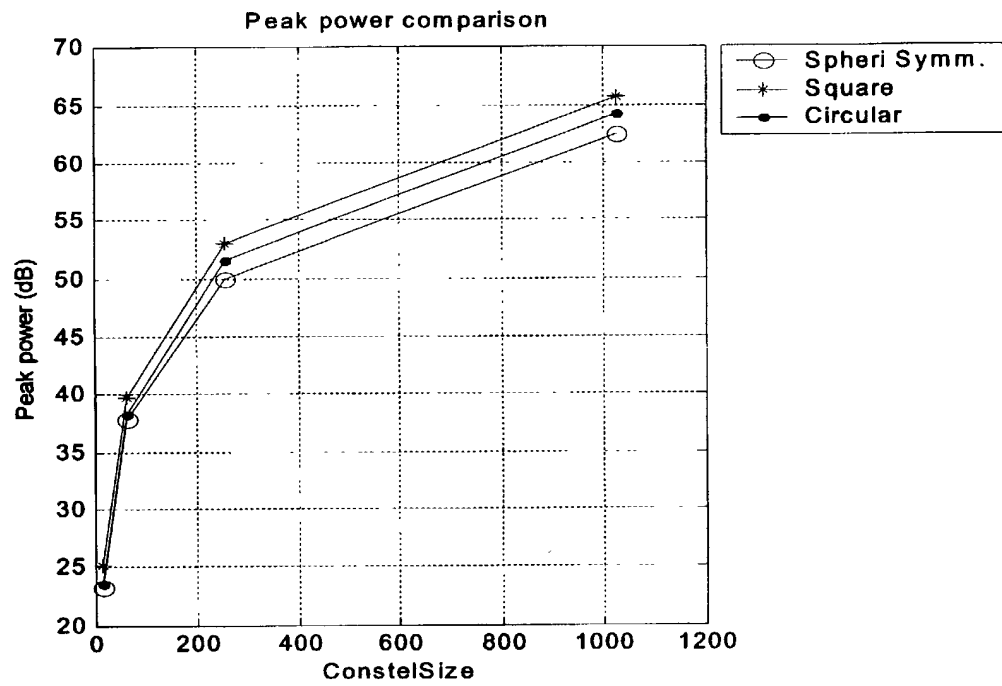


FIG. 5

FIG. 6a

QAM size	Square Constellation				Circular Constellation				Spherical Symmetric Constellation			
	Peak Power	Average Power	Average Power (dB)	PAR (dB)	Peak Power	Average Power	Average Power (dB)	PAR (dB)	Peak Power	Average Power	Average Power (dB)	PAR (dB)
16	18	10	10	2.5627	14.9282	11.696	10.6804	1.0597	14.7005	9.7162	9.87466	1.7984
64	96	42	16.2325	3.6796	79.77	50.5932	17.0409	1.97747	78.3406	40.4231	16.0663	2.8736
256	460	170	22.3045	4.2276	365.0668	206.2193	23.1433	2.4807	312.9502	160.2957	22.0492	2.9056
1024	1822	682	28.3378	4.4997	1558.2479	828.7357	28.1842	2.74221	1265.1433	638.8297	28.0539	2.9575

Note: minimum distance  $d_{min} = 2$

FIG. 6b

QAM Constellation size	Peak Power Reduction (Sq./Sph) (dB)	Peak Power Reduction (Cir./Sph) (dB)	PAR Reduction (Sq./Sph) (dB)	PAR Reduction (Cir./Sph) (dB)
16	0.879403987	0.066753385	0.754368445	-0.7387
64	0.972391823	0.078526986	0.806195079	-0.8961
256	1.577372803	0.669244662	1.322102313	-0.4248
1024	1.816136635	0.904968304	1.532143876	-0.2253

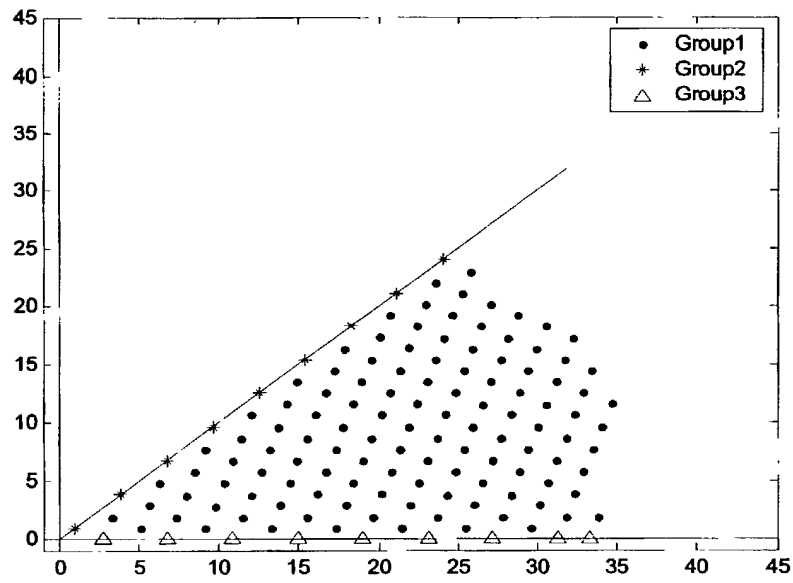


FIG. 7

FIG. 8

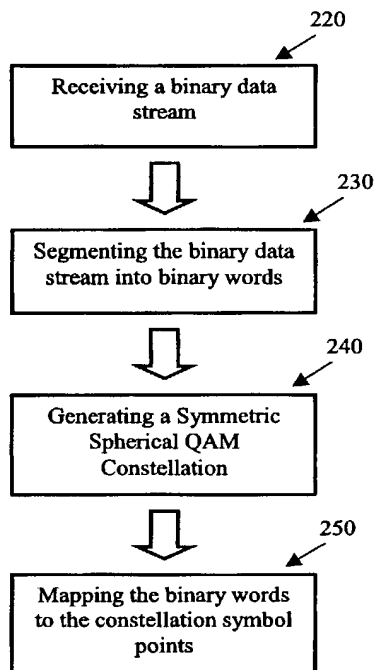




FIG. 9

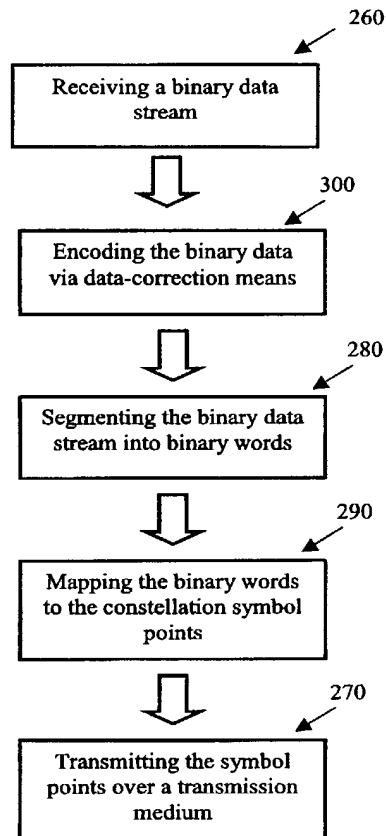


FIG. 10

